

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1-141 (canceled).

142. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAGCTGCCTTG, and the DNA comprises the sequence:

5670	5680	5690	5700		
A	AAGAGCAGAA	GACAGTGGCA	ATGAGAGTGA		
5710	5720	5730	5740	5750	5760
AGGAGAAATA	TCAGCACTTG	TGGAGATGGG	GGTGGAAATG	GGGCACCATG	CTCCTGGGA
5770	5780	5790	5800	5810	5820
TATTGATGAT	CTGTAGTGCT	ACAGAAAAAT	TGTGGGTCAC	AGTCTATTAT	GGGGTACCTG
5830	5840	5850	5860	5870	5880
TGTGGAAGGA	AGCAACCACC	ACTCTATTTC	GTGCATCAGA	TGCTAAAGCA	TATGATACAG
5890	5900	5910	5920	5930	5940
AGGTACATAA	TGTTGGGCC	ACACATGCCT	GTGTACCCAC	AGACCCCAAC	CCACAAGAAG
5950	5960	5970	5980	5990	6000
TAGTATTGGT	AAATGTGACA	GAAAATTTA	ACATGTGGAA	AAATGACATG	GTAGAACAGA
6010	6020	6030	6040	6050	6060
TGCATGAGGA	TATAATCAGT	TTATGGGATC	AAAGCCTAAA	GCCATGTGTA	AAATTAACCC
6070	6080	6090	6100	6110	6120
CACTCTGTGT	TAGTTAAAG	TGCAC TGATT	TGGGAAATGC	TACTAATACC	AATAGTAGTA
6130	6140	6150	6160	6170	6180
ATACCAATAG	TAGTAGCGGG	GAAATGATGA	TGGAGAAAGG	AGAGATAAAA	AACTGCTCTT
6190	6200	6210	6220	6230	6240
TCAATATCAG	CACAAGCATA	AGAGGTAAGG	TGCAGAAAGA	ATATGCATTT	TTTTATAAAC
6250	6260	6270	6280	6290	6300
TTGATATAAT	ACCAATAGAT	AATGATACTA	CCAGCTATAC	GTTGACAAGT	TGTAACACCT

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6310	6320	6330	6340	6350	6360
CAGTCATTAC	ACAGGCCTGT	CCAAAGGTAT	CCTTGAGCC	AATTCCCATA	CATTATTGTG
6370	6380	6390	6400	6410	6420
CCCCGGCTGG	TTTTCGCGATT	CTAAAATGTA	ATAATAAGAC	GTTCAATGGA	ACAGGACCAT
6430	6440	6450	6460	6470	6480
GTACAAATGT	CAGCACAGTA	CAATGTACAC	ATGGAATTAG	GCCAGTAGTA	TCAACTCAAC
6490	6500	6510	6520	6530	6540
TGCTGTTGAA	TGGCAGTCTA	GCAGAAGAAG	AGGTAGTAAT	TAGATCTGCC	AATTCACAG
6550	6560	6570	6580	6590	6600
ACAATGCTAA	AACCATAATA	GTACAGCTGA	ACCAATCTGT	AGAAATTAAAT	TGTACAAGAC
6610	6620	6630	6640	6650	6660
CCAACAAACAA	TACAAGAAAA	AGTATCCGTA	TCCAGAGGGG	ACCAGGGAGA	GCATTTGTTA
6670	6680	6690	6700	6710	6720
CAATAGGAAA	AATAGGAAAT	ATGAGACAAG	CACATTGTA	CATTAGTAGA	GCAAAATGGA
6730	6740	6750	6760	6770	6780
ATGCCACTTT	AAAACAGATA	GCTAGCAAAT	TAAGAGAAC	ATTGGAAAT	AATAAAACAA
6790	6800	6810	6820	6830	6840
TAATCTTTAA	GCAATCCTCA	GGAGGGGACC	CAGAAATTGT	AACGCACAGT	TTTAATTGTG
6850	6860	6870	6880	6890	6900
GAGGGGAATT	TTTCTACTGT	AATTCAACAC	AACTGTTAA	TAGTACTTGG	TTTAATAGTA
6910	6920	6930	6940	6950	6960
CTTGGAGTAC	TGAAGGGTCA	AATAACACTG	AAGGAAGTGA	CACAATCACA	CTCCCATGCA
6970	6980	6990	7000	7010	7020
GAATAAAACA	ATTTATAAAC	ATGTGGCAGG	AAGTAGGAAA	AGCAATGTAT	GCCCCCTCCCA
7030	7040	7050	7060	7070	7080
TCAGCGGACA	AATTAGATGT	TCATCAAATA	TTACAGGGCT	GCTATTAACA	AGAGATGGTG
7090	7100	7110	7120	7130	7140
GTAATAACAA	CAATGGGTCC	GAGATCTTCA	GACCTGGAGG	AGGAGATATG	AGGGACAATT
7150	7160	7170	7180	7190	7200
GGAGAAAGTGA	ATTATATAAA	TATAAAGTAG	TAAAAATTGA	ACCATTAGGA	GTAGCACCCA
7210	7220	7230	7240	7250	7260
CCAAGGCAAA	GAGAAGAGTG	GTGCAGAGAG	AAAAAAGAGC	AGTGGGAATA	GGAGCTTGT

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7270	7280	7290	7300	7310	7320
TCCTTGGGTT	CTTGGGAGCA	GCAGGAAGCA	CTATGGGCGC	ACGGTCAATG	ACGCTGACGG
7330	7340	7350	7360	7370	7380
TACAGGCCAG	ACAATTATTG	TCTGGTATAG	TGCAGCAGCA	GAACAATTTG	CTGAGGGCTA
7390	7400	7410	7420	7430	7440
TTGAGGCGCA	ACAGCATCTG	TTGCAACTCA	CAGTCTGGGG	CATCAAGCAG	CTCCAGGCAA
7450	7460	7470	7480	7490	7500
GAATCCTGGC	TGTGGAAAGA	TACCTAAAGG	ATCAACAGCT	CCTGGGGATT	TGGGGTTGCT
7510	7520	7530	7540	7550	7560
CTGGAAAACT	CATTGCAACC	ACTGCTGTGC	CTTGGAAATGC	TAGTTGGAGT	AATAAATCTC
7570	7580	7590	7600	7610	7620
TGGAACAGAT	TTGGAATAAC	ATGACCTGGA	TGGAGTGGGA	CAGAGAAATT	AACAATTACA
7630	7640	7650	7660	7670	7680
CAAGCTTAAT	ACATTCCTTA	ATTGAAGAAT	CGAAAACCA	GCAAGAAAAG	AATGAACAAG
7690	7700	7710	7720	7730	7740
AATTATTGGA	ATTAGATAAA	TGGGCAAGTT	TGTGGAATTG	GTTAACATA	ACAAATTGGC
7750	7760	7770	7780	7790	7800
TGTGGTATAT	AAAAATATTTC	ATAATGATAG	TAGGAGGCTT	GGTAGGTTTA	AGAATAGTTT
7810	7820	7830	7840	7850	7860
TTGCTGTACT	TTCTATAGTG	AATAGAGTTA	GGCAGGGATA	TTCACCATTA	TCGTTTCAGA
7870	7880	7890	7900	7910	7920
CCCACCTCCC	AACCCCGAGG	GGACCCGACA	GGCCCGAAGG	AATAGAAGAA	GAAGGTGGAG
7930	7940	7950	7960	7970	7980
AGAGAGACAG	AGACAGATCC	ATTGATTAG	TGAACGGATC	CTTAGCACTT	ATCTGGGACG
7990	8000	8010	8020	8030	8040
ATCTGCGGAG	CCTTGTGCCT	CTTCAGCTAC	CACCGCTTGA	GAGACTTACT	CTTGATTGTA
8050	8060	8070	8080	8090	8100
ACGAGGATTG	TGGAACCTCT	GGGACGCAGG	GGGTGGGAAG	CCCTCAAATA	TTGGTGGAAAT
8110	8120	8130			
CTCCTACAGT	ATTGGAGTCA	GGAACCTAAAG	AA.		

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143. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence:

						5700
						ATGAGAGTGA
5710	5720	5730	5740	5750	5760	
AGGAGAAATA	TCAGCACTTG	TGGAGATGGG	GGTGGAAATG	GGGCACCATG	CTCCTGGGA	
5770	5780	5790	5800	5810	5820	
TATTGATGAT	CTGTAGTGCT	ACAGAAAAAT	TGTGGGTAC	AGTCTATTAT	GGGGTACCTG	
5830	5840	5850	5860	5870	5880	
TGTGGAAGGA	AGCAAACCACC	ACTCTATTTT	GTGCATCAGA	TGCTAAAGCA	TATGATACAG	
5890	5900	5910	5920	5930	5940	
AGGTACATAA	TGTTGGGCC	ACACATGCCT	GTGTACCCAC	AGACCCCAAC	CCACAAGAAG	
5950	5960	5970	5980	5990	6000	
TAGTATTGGT	AAATGTGACA	GAAAATTTA	ACATGTGGAA	AAATGACATG	GTAGAACAGA	
6010	6020	6030	6040	6050	6060	
TGCATGAGGA	TATAATCAGT	TTATGGGATC	AAAGCCTAAA	GCCATGTGTA	AAATTAACCC	
6070	6080	6090	6100	6110	6120	
CACTCTGTGT	TAGTTAAAG	TGCACTGATT	TGGGAAATGC	TACTAATACC	AATAGTAGTA	
6130	6140	6150	6160	6170	6180	
ATACCAATAG	TAGTAGCGGG	GAAATGATGA	TGGAGAAAGG	AGAGATAAAA	AACTGCTCTT	
6190	6200	6210	6220	6230	6240	
TCAATATCAG	CACAAGCATA	AGAGGTAAGG	TGCAGAAAGA	ATATGCATTT	TTTTATAAAC	
6250	6260	6270	6280	6290	6300	
TTGATATAAT	ACCAATAGAT	AATGATACTA	CCAGCTATAC	GTTGACAAGT	TGTAACACCT	
6310	6320	6330	6340	6350	6360	
CAGTCATTAC	ACAGGCCTGT	CCAAAGGTAT	CCTTGAGCC	AATTCCCATA	CATTATTGTG	
6370	6380	6390	6400	6410	6420	
CCCCGGCTGG	TTTGCGATT	CTAAAATGTA	ATAATAAGAC	GTTCAATGGA	ACAGGACCAT	
6430	6440	6450	6460	6470	6480	
GTACAAATGT	CAGCACAGTA	CAATGTACAC	ATGGAATTAG	GCCAGTAGTA	TCAACTCAAC	

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6490	6500	6510	6520	6530	6540
TGCTGTTGAA	TGGCAGTCTA	GCAGAAGAAG	AGGTAGTAAT	TAGATCTGCC	AATTCACAG
6550	6560	6570	6580	6590	6600
ACAATGCTAA	AACCATAATA	GTACAGCTGA	ACCAATCTGT	AGAAATTAAAT	TGTACAAGAC
6610	6620	6630	6640	6650	6660
CCAACAACAA	TACAAGAAAAA	AGTATCCGTA	TCCAGAGGGG	ACCAGGGAGA	GCATTTGTTA
6670	6680	6690	6700	6710	6720
CAATAGGAAA	AATAGGAAAT	ATGAGACAAG	CACATTGTAA	CATTAGTAGA	GCAAAATGGA
6730	6740	6750	6760	6770	6780
ATGCCACTTT	AAAACAGATA	GCTAGCAAAT	TAAGAGAACAA	ATTGGAAAT	AATAAAACAA
6790	6800	6810	6820	6830	6840
TAATCTTTAA	GCAATCCTCA	GGAGGGGACC	CAGAAATTGT	AACGCACAGT	TTTAATTGTG
6850	6860	6870	6880	6890	6900
GAGGGGAATT	TTTCTACTGT	AATTCAACAC	AACTGTTAA	TAGTACTTGG	TTTAATAGTA
6910	6920	6930	6940	6950	6960
CTTGGAGTAC	TGAAGGGTCA	AATAACACTG	AAGGAAGTGA	CACAATCACA	CTCCCATGCA
6970	6980	6990	7000	7010	7020
GAATAAAACA	ATTTATAAAC	ATGTGGCAGG	AAGTAGGAAA	AGCAATGTAT	GCCCCTCCCA
7030	7040	7050	7060	7070	7080
TCAGCGGACA	AATTAGATGT	TCATCAAATA	TTACAGGGCT	GCTATTAACA	AGAGATGGTG
7090	7100	7110	7120	7130	7140
GTAATAACAA	CAATGGGTCC	GAGATCTTCA	GACCTGGAGG	AGGAGATATG	AGGGACAATT
7150	7160	7170	7180	7190	7200
GGAGAAGTGA	ATTATATAAA	TATAAAGTAG	TAAAAATTGA	ACCATTAGGA	GTAGCACCCA
7210	7220	7230	7240	7250	7260
CCAAGGCCAA	GAGAAGAGTG	GTGCAGAGAG	AAAAAAAGAGC	AGTGGGAATA	GGAGCTTGT
7270	7280	7290	7300	7310	7320
TCCTTGGGTT	CTTGGGAGCA	GCAGGAAGCA	CTATGGCGC	ACGGTCAATG	ACGCTGACGG
7330	7340	7350	7360	7370	7380
TACAGGCCAG	ACAATTATTG	TCTGGTATAG	TGCAGCAGCA	GAACAATTG	CTGAGGGCTA

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7390	7400	7410	7420	7430	7440
TTGAGGCGCA	ACAGCATCTG	TTGCAACTCA	CAGTCTGGGG	CATCAAGCAG	CTCCAGGCAA
7450	7460	7470	7480	7490	7500
GAATCCTGGC	TGTGGAAAGA	TACCTAAAGG	ATCAACAGCT	CCTGGGGATT	TGGGGTTGCT
7510	7520	7530	7540	7550	7560
CTGGAAAACT	CATTTGCACC	ACTGCTGTGC	CTTGGAAATGC	TAGTTGGAGT	AATAAATCTC
7570	7580	7590	7600	7610	7620
TGGAACAGAT	TTGGAATAAC	ATGACCTGGA	TGGAGTGGGA	CAGAGAAATT	AACAATTACA
7630	7640	7650	7660	7670	7680
CAAGCTTAAT	ACATTCCCTTA	ATTGAAGAAT	CGAAAACCA	GCAAGAAAAG	AATGAACAAG
7690	7700	7710	7720	7730	7740
AATTATTGGA	ATTAGATAAA	TGGGCAAGTT	TGTGGAATTG	GTTAACATA	ACAAATTGGC
7750	7760	7770	7780	7790	7800
TGTGGTATAT	AAAAATATTTC	ATAATGATAG	TAGGAGGCTT	GGTAGGTTTA	AGAATAGTTT
7810	7820	7830	7840	7850	7860
TTGCTGTACT	TTCTATAGTG	AATAGAGTTA	GGCAGGGATA	TTCACCATTAA	TCGTTTCAGA
7870	7880	7890	7900	7910	7920
CCCACCTCCC	AACCCCGAGG	GGACCCGACA	GGCCCGAAGG	AATAGAAGAA	GAAGGTGGAG
7930	7940	7950	7960	7970	7980
AGAGAGACAG	AGACAGATCC	ATTCGATTAG	TGAACGGATC	CTTAGCACTT	ATCTGGGACG
7990	8000	8010	8020	8030	8040
ATCTGCGGAG	CCTTGTGCCT	CTTCAGCTAC	CACCGCTTGA	GAGACTTACT	CTTGATTGTA
8050	8060	8070	8080	8090	8100
ACGAGGATTG	TGGAACTTCT	GGGACGCAGG	GGGTGGGAAG	CCCTCAAATA	TTGGTGGAAAT
8110	8120	8130			
CTCCTACAGT	ATTGGAGTCA	GGAACCTAAAG	AA.		

144. (previously presented) A cloned DNA of Human Immunodeficiency Virus

Type 1 (HIV-1), wherein the DNA comprises the sequence

CTCAATAAGCTTGCCTTG, and the DNA comprises the sequence:

6100	6110	6120
GAATGC	TACTAATACC	AATAGTAGTA

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6130 6140 6150 6160 6170 6180
 ATACCAATAG TAGTAGCGGG GAAATGATGA TGGAGAAAGG AGAGATAAAA AACTGCTCTT
 6190 6200
 TCAATATCAG CACAAGCATA.

145. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence:

6260 6270 6280 6290 6300
 T AATGATACTA CCAGCTATAC GTTGACAAAGT TGTAACACCT
 6310
 CAGTCATTAC.

146. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence:

6390 6400 6410 6420
 A ATAATAAGAC GTTCAATGGA ACAGGACCAT
 6430 6440
 GTACAAATGT CAGCACAGTA.

147. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence:

6490 6500 6510 6520 6530 6540
 GTTGAA TGGCAGTCTA GCAGAAGAAG AGGTAGTAAT TAGATCTGCC AATTCACAG
 6550 6560 6570 6580 6590 6600
 ACAATGCTAA AACCATAATA GTACAGCTGA ACCAATCTGT AGAAATTAAT TGTACAAGAC
 6610 6620
 CCAACAAACAA TACAAGAAAA.

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148. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence: :

6860 6870 6880 6890 6900
 T AATTCAACAC AACTGTTAA TAGTACTTGG TTTAATAGTA
 6910 6920 6930
 CTTGGAGTAC TGAAGGGTCA AATAACACTG.

149. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
 CTCATAAAAGCTTGCCTTG, and the DNA comprises the sequence:

7540 7550 7560
 GAATGC TAGTTGGAGT AATAAATCTC
 7570 7580 7590 7600 7610 7620
 TGGAACAGAT TTGGAATAAC ATGACCTGGA TGGAGTGGGA CAGAGAAATT AACAAATTACA
 7630
 CAAGCTTAAT.

150. (new) A method of using the cloned DNA of any of claims 142-149 to detect HIV-1 RNA comprising:

- (a) providing a biological fluid comprising HIV-1 infected cells;
- (b) preparing a cell-free supernatant from the biological fluid;
- (c) isolating HIV-1 virions from the cell-free supernatant;
- (d) disrupting the virions to release HIV-1 RNA;
- (e) contacting the HIV-1 RNA with the HIV-1 DNA of any of claims 142-149; and
- (f) detecting hybridization between the HIV-1 RNA and the HIV-1 DNA.

151. (new) A method of making HIV-1 nucleic acid hybridizable with the cloned DNA of any of claims 142-149 comprising:

- (a) providing a biological fluid comprising HIV-1 infected cells;

- (b) preparing a cell-free supernatant from the biological fluid;
- (c) isolating HIV-1 virions from the cell-free supernatant; and
- (d) disrupting the virions to release HIV-1 RNA.

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